CASE STUDY

Improving Access to Quality Care for People with I/DD with Medpod MobileDoc™

Medpod is a complete healthcare technology and infrastructure ecosystem architected intentionally to transform the delivery of care. This pilot study reports certain findings included in the Research Foundation for Mental Hygiene's evaluation of a comprehensive pilot healthcare program funded with a grant from the New York State Department of Health that incorporated Medpod MobileDoc as part of a telemedicine pilot program. Although the results of the study are not statistically significant, we believe that they may be useful to highlight the benefits of the Medpod MobileDoc telemedicine solution in the patient population described below.

The Challenge

The intellectually and developmentally disabled (I/DD) population faces complex, lifelong health challenges, making it imperative that they are seen by providers and at facilities with the appropriate expertise and technology. These challenges can be communicative, cognitive, or behavioral in nature. People with severe communications challenges may not be able to alert their caregivers when there is a problem and must rely on their caregivers to intuit and relay the problem to healthcare professionals. Individuals with cognitive challenges may not be able to describe their symptoms, and patients with behavioral challenges often become anxious when visiting a clinic or emergency room (ER). This results in an uncomfortable, and even unsafe, environment not only for the individual, but also for clinic and ER staff, and other patients.

Because of their unique healthcare challenges, people with I/DD often live in group homes. Although the group homes are overseen by a residential nurse (who often is responsible for multiple group homes), people with I/DD visit the ER almost twice as frequently as the general population, and when they do visit the ER, people with I/DD are more than twice as likely as the general population to be admitted.[1]

ER physicians do not typically have experience treating people with I/DD and therefore may be unfamiliar with the challenges and differences in providing their care. Furthermore, the vital signs and clinical metrics for people with I/DD often fall outside the range exhibited by other populations. This may cause ER physicians to inaccurately diagnose and treat non-issues. As a result, ER physicians may change patients' medications unnecessarily, which negatively impacts patients' well-being. Inappropriate changes in care may take weeks to normalize.[2]

Patient described is not pictured.

1. "Intellectual/Developmental Disabilities (I/DD) and DSRIP: Opportunities for PPSs to engage providers and Medicaid members." Medicaid Redesign Team. New York State Department of Health. October 2015.
2. Dr. James Powell, MD CMO Long Island Select Health and Supervising Physician of ACA Urgent Care Grant. Dr Powell did not receive any renumeration from Medpod.

When Medpod MobileDoc was integrated with the ACA Program:

86%
of ER visits avoided

As reported by nurses and doctors administering the telemedicine exam.

93%
of cases saw reduced patient anxiety

As reported by caregivers.

93%
of residents always prefer MobileDoc visits

Estimated Medicaid savings between
$564K
and
$2.38M

As determined by RFMH, after taking into account various assumptions..

The complexities of treating people with I/DD significantly contribute to the disproportionate costs associated with their care. People with I/DD account for 11.6% of New York State Medicaid's expenditures, even though they make up less than 2% of beneficiaries. In 2014, New York State Medicaid spent roughly $154 million on hospital expenditures for people with I/DD.[3] This is only a portion of the healthcare dollars that are dedicated to I/DD patients, as total spending also includes Medicare, commercial payers and out-of-pocket expenses.

Visiting the ER presents unique challenges for people with I/DD and their caregivers. Group home staff must prepare residents, call an ambulance for transportation, and wait for an on-call staff member to arrive before accompanying residents to the ER. ER staff is often untrained on the specific care requirements for people with I/DD, which may result in unnecessary testing. The entire process often causes anxiety, discomfort and fear for the resident. Yet many trips to the ER could be avoided if there were appropriate alternatives available for people with I/DD.[4]

People with I/DD are 2X more likely than the general population to *visit the ER,* and when seen, are 2X more likely *to be admitted.*

The Multifaceted Urgent Care Pilot Program

The New York State Department of Health (NYSDOH) awarded a grant to Advance Care Alliance, which is a consortium of agencies serving people with I/DD and their families, to design an alternative option to ER use for people with I/DD. With this grant, Advance Care Alliance sought to reduce unnecessary ER utilization, increase access to care and make care more patient-centric. To address those objectives, Advance Care Alliance designed a comprehensive program to deliver urgent care to people with I/DD (the ACA Program).

The ACA Program offered a 24/7 call center staffed with nurses who could provide an initial phone assessment and, if necessary, could dispatch nurses to certified residences at night and on weekends utilizing the MobileDoc solution during the last 6.5 months of the program. Advance Care Alliance tapped Long Island Select Healthcare (LISH) to provide in-residence urgent care services for its residences on Long Island.

Advance Care Alliance integrated a telemedicine pilot into the ACA Program during its last six and a half months. Through the telemedicine pilot, nurses who were dispatched to the group homes were equipped with Medpod MobileDoc units. The Medpod MobileDoc enabled the nurses and physicians to expand the type of care that could be delivered to people with I/DD in their homes. By integrating its proprietary communication software with professional grade medical and laboratory devices, the Medpod MobileDoc enabled physicians to remotely conduct a full examination, from basic vitals to more specialized tests, such as EKGs.

3. "Value Based Payment Advisory Group – Services for the Intellectually/Developmentally Disabled." Medicaid Redesign Team. New York State Department of Health. January 2016.
4. Dr. James Powell Testimony.

TOP DIAGNOSES OF PEOPLE WITH I/DD**

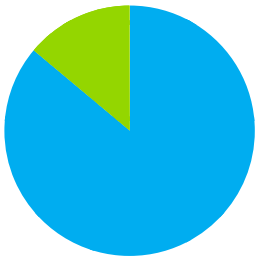
- Cerebral Palsy
- Autism
- Down Syndrome
- Fragile X Syndrome

TOP REASONS A PERSON WITH I/DD VISITS THE ER**

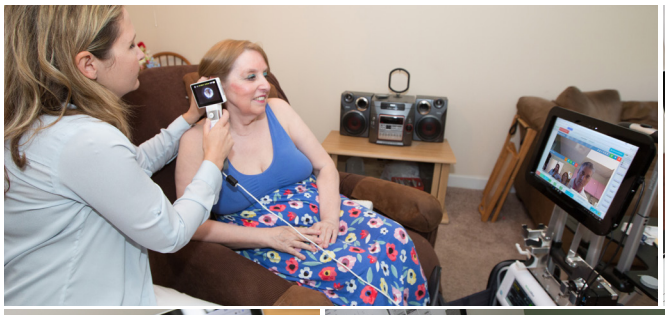
- Constipation
- Bruising, rashes or abrasions without clear cause
- Individual hit by another individual
- Choking
- Minor orthopedic issues related to toes and fingers
- Gastric tubes falling out
- Hypertension
- Diabetes

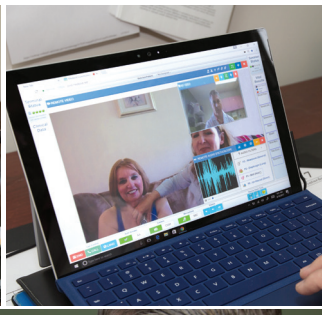
GRANT ENROLLEE'S RESIDENTIAL STATUS*

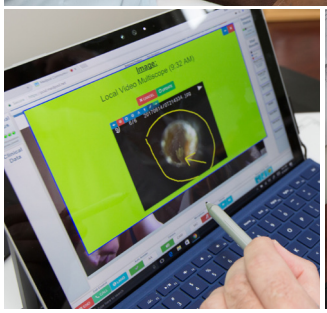
20%
Private Residence, Alone or With Family



80%
Group Homes







Patient described is not pictured.

The Real-World Case Example

On a Sunday afternoon in July, Rosie[5], the residential nurse, noticed that Linda[6], a resident in her 40s, had a cough and appeared to be acting differently than normal. So Rosie called the ACA Program's urgent care call center and, as part of the telemedicine pilot, a nurse was dispatched with the Medpod MobileDoc. Linda remained at the group home to wait for the nurse, who arrived within the promised 90-minute window. The nurse reviewed Linda's medical record, took her vital signs and performed a rapid strep test with the Medpod MobileDoc's connected professional grade medical devices.

The nurse then notified Dr. James Powell, the ACA Program's supervising physician, that Linda was ready to be evaluated. Dr. Powell logged into Medpod's proprietary, cloud-based software, pulled up Linda's record, which was already updated with her vitals and the results of the rapid strep test, and began his remote examination. Dr. Powell directed the nurse to use the stethoscope so he could listen to Linda's lungs and to use the otoscope lens so he could look in Linda's throat and ears, in real-time. Because Dr. Powell was able to see and speak with Linda, he was able to make his own observations and pair those with vital signs data, test results, and the nurse's observations. As a result, he was able to diagnose Linda with bronchitis, prescribe the necessary medication, and Linda did not need to visit the ER.

The Results

Over the course of the six and a half months of the telemedicine pilot, the ACA Program provided 253 telemedicine visits using the Medpod MobileDoc

5. Name has been changed to protect the patient's identity.
6. Name has been changed to protect the patient's identity.

* BIP Grant Evaluation
** Dr. James Powell Testimony

URGENT CARE CONDITIONS TREATED WITH MEDPOD MOBILEDOC DURING GRANT**:

- Conjunctivitis
- Otitis Media
- TMJ
- Pharyngitis
- Herpes Simplex
- Shingles
- Dermatitis
- Bronchitis, URI, sinusitis, pneumonia
- Diarrhea/Constipation
- Decubitus ulcers
- UTI's
- Osteoarthritis
- Foot pain (plantar fasciitis)
- Influenza
- GERD
- Asthma
- Bruising
- Falls
- Hemorrhoid
- Back pain
- Bug bites
- Scabies exposure
- Muscle spasm

Urgent, preventative, episodic and chronic care can all be delivered remotely

"Having (Medpod) come here and checking you out, while having the doctor see you on the screen…I like that."

— Patient

to 161 patients. Based on the information provided by the nurses and doctors administering each telemedicine visit, 218 of the 253 visits that integrated the Medpod MobileDoc into the ACA Program resulted in an averted ER visit - representing an 86% ER aversion rate.[7] Based on ACA Program data and taking into account various assumptions established by the Research Foundation for Mental Hygiene (RFMH), the RFMH estimated that introducing the telemedicine pilot saved between $564K and $2.38M in Medicaid savings for these 161 patients over the course of six and a half months.[8]

Caregivers reported that the Medpod MobileDoc reduced residents' anxiety associated with urgent medical care in 93% of cases.[9] Caregivers stated that "individuals are more comfortable within the home residence" and think it's "great, especially after hours, [that] residents get to stay in their PJ's and don't have to go outside to be evaluated." Residents recognize that being seen via the Medpod MobileDoc "prevent[s them] from wasting time in the [ER], which usually takes 5-6 hours." Residents agree, with 93% reporting that they would always prefer to be seen via the Medpod MobileDoc over going to the ER or an urgent care center. Residents comment that they "don't like going out to the doctor…and [they] like staying home and seeing the doctor on the screen."[10]

With over 130,000 people with I/DD in New York, the Medpod MobileDoc, when used as part of a comprehensive urgent care program like the ACA Program has the potential to positively transform the way that this population receives care and to make that care more affordable.

Disclaimer: These results and situations are anecdotal evidence of the Medpod MobileDoc's effectiveness and do not guarantee future results.

7. As reported by nurses and doctors administering the telemedicine exam.
8. As determined by RFMH, after taking into account various assumptions.
9 As reported by caregivers.
10. BIP Grant Evaluation.

** Dr. James Powell Testimony

For a demo contact info@medpodhealth.com, 844-medpod1

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